

**THAT WHICH IS CLAIMED IS:**

1. Process for estimating the impulse response of an information transmission channel comprising an information sender, an information receiver and a means of propagation extending between  
5 the sender and the receiver, characterized in that a first estimate (40) is made of the impulse response (H) of the channel considered as a whole, then this first estimate is corrected (41), independently of the information transmitted, by taking account of the fact  
10 that the impulse response of the sender and the impulse response of the receiver are known, so as to obtain a corrected final estimate (HF) of the impulse response of the channel.

2. Process according to Claim 1, characterized in that the coefficients (hf) of the final estimate of the impulse response of the channel are obtained by multiplying the coefficients (h) of the  
5 first estimate of the impulse response of the channel by a matrix (M) whose coefficients are predetermined and representative of the impulse responses of the sender and of the receiver, and are independent of the information transmitted on the channel.

3. Process according to one of the preceding claims, characterized in that the first estimate (H) is a so-called blind estimate or a so-called learned estimate.

4. Device for estimating the impulse response of an information transmission channel comprising an

information sender, an information receiver and a means  
of propagation extending between the sender and the  
5 receiver, characterized in that it comprises first  
estimation means (BST1) able to make a first estimate  
of the impulse response (H) of the channel considered  
as a whole, and second estimation means (BCR, MH),  
connected to the first estimation means, and able to  
10 correct this first estimate, independently of the  
information transmitted, by taking account of the fact  
that the impulse response of the sender and the impulse  
response of the receiver are known, so as to deliver a  
corrected final estimate (HF) of the impulse response  
15 of the channel.

5. Device according to Claim 4, characterized  
in that the second estimation means comprise a memory  
(MM) containing a matrix whose coefficients are  
predetermined and representative of the impulse  
5 responses of the sender and of the receiver, and are  
independent of the information transmitted on the  
channel, and processing means (BCR) able to multiply  
the coefficients of the first estimate of the impulse  
response of the channel by the said matrix, so as to  
10 obtain the coefficients of the final estimate of the  
impulse response of the channel.

6. Device according to Claim 4 or 5,  
characterized in that the first estimation means (BST1)  
are able to make a first so-called blind estimate.

7. Device according to Claim 4 or 5,  
characterized in that the first estimation means (BST1)  
are able to make a first so-called learned estimate.

8. Digital information receiver, in particular cellular mobile telephone, characterized in that it incorporates a device as defined in one of Claims 4 to 7.

9. Computer program comprising program-code means implementing the process as defined in one of Claims 1 to 3 when the said program is executed within a processor.

10. Support, capable of being read by a processor, and containing program-code means able to implement the process as defined in one of Claims 1 to 3 when the said program is executed within the  
5 processor.

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